

**WHAT IS CLAIMED IS:**

1. A stepper motor, comprising:

5           a housing having a chamber therein, wherein the housing frame has an annular plate and a bottom plate coupled with the annular plate, and an included angle between the annular plate and the bottom plate set at ninety degree;

          a stator having a space at a center thereof and wound coils on the stator to  
10   generate induced magnetic field in the space, wherein the stator has a circumference closely attached on the inner side of the annular plate of the housing frame;

          a rotor received in the inner space of the stator to be driven for rotating by the induced magnetic field;  
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          a motor front-plate which is mounted with a shaft, while shaft having a portion outside the housing and has a portion inside the chamber of the housing and coupled with the rotor is secured on the housing frame to close the chamber.

20           2. The stepper motor as defined in claim 1, wherein the bottom plate is coupled with the annular plate after the stator is fixed in the annular plate.

          3. The stepper motor as defined in claim 1, wherein the annular plate is made of galvanized steel and then is roll-molded into an annular shape.

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4. The stepper motor as defined in claim 1, wherein the annular plate is made of silicon steel and then is roll-molded into an annular shape.

5. The stepper motor as defined in claim 1, wherein the annular plate is made of a magnetic permeable material.

6. The stepper motor as defined in claim 5, wherein the bottom plate is coupled with the annular plate by spot welding.

10 7. The stepper motor as defined in claim 1, further comprising a plastic layer on outer sides of the annular plate and the bottom plate.